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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,349	08/13/2001	Michael Gutin	MALOMED=1A	6838

1444 7590 08/06/2003

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EXAMINER

CHERRY, EUNCHA P

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 08/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,349

Applicant(s)

GUTIN ET AL. *CH*

Examiner

EUNCHA P. CHERRY

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 28-31, 33 and 34 is/are rejected.
- 7) ☒ Claim(s) 17-27, 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 5, 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Election/Restrictions

1. After careful review of newly submitted claims, it is found that the restriction requirement mailed on 4/9/03 is no longer applied. Thus, the restriction requirement is withdrawn hereby.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-16, 28-31, 33 and 34 are rejected under 35 U.S.C. 102(a) as being anticipated by US 2002/0003440 A1, Qian et al.

Qian et al discloses a device for handling an optical pulse signal (see abstract lines 5-6) comprising a cascaded second harmonic generating (Fig. 1) with respect to a particular fundamental harmonic, the device is characterized by such an optical length selected for an incoming optical pulse signal carried by a wavelength and outputting at least one output pulse

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signal (see Fig. 1) from an output pulse signal at the fundamental harmonic, wherein the treatment of nonlinearity and the pulse shaping are performed (paragraphs 22, 23, 24). The SHG optical crystal is BBO (see Fig. 6, table). The device has The output optical pulse signal at the FH that reaches the maximal peak power or at the SH with the non-zero peak power (inherent because the device is suitable for treatment of non-linearity or suitable for signal monitoring as illustrated in paragraphs 19-29). There is an amplitude modulation that reaches the max. peak power (see Fig. 1). The signal has multi-segment trajectory in the device (see Fig. 3), in zig-zag manner. There is a kerr effect created by the device (see Fig. 1). The conveying step includes a fiber link (see paragraph 51). The SHG element is selected with smaller values of its mismatch parameter (see Fig. 6). The signal is multi-channel (see the wavelength shown in Fig. 5).

The method of handling an optical pulse signal, such as providing, selecting, conveying and obtaining are inherently met by the disclosure of the prior art.

Allowable Subject Matter

4. Claims 17-27 and 32 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

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independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: claims are allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggests the element being covered by mirror surfaces at least its two opposite facets and leaving at least two windows at the opposite facets for an incoming optical beam and an outgoing beam respectively, the arrangement being such to create one or more internal reflections of the optical beam as set forth in the claimed invention.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Aoshima et al discloses a pulse shaping device having a kerr effective medium.

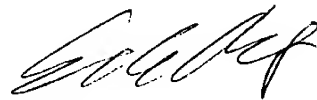
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUNCHA P. CHERRY whose telephone number is 703-305-0997. The examiner can normally be reached on M-F 6:30-4:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DREW DUNN can be reached on 703-305-0024. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



EUNCHA P. CHERRY
Primary Examiner
Art Unit 2872

July 24, 2003